Session Materials:

goo.gl/RGKxNc

Building a Growth Mindset

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Adapted from Montana Math Matters 2018 series by Rusty Bowers, Dan Burfeind, Brooke Taylor, & Jake Warner

Data and Assessment Conference
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Putting Montana Students First

Session Objectives

- Define Growth Mindset
- Assess our Own Mindset
- Growth Mindset Messaging
- Resources for Building a Growth Mindset in the Classroom

Quick Word Association

- In Round Robin fashion, go around your group and say what comes to your mind when I say:

Growth Mindset

Let's Mini-Assess…

tinyurl.com/MTmindsets

In case, you do not have a device

1. No matter how much intelligence you have, you can always change it a good deal.
◯ Disagree A Lot ◯ Disagree ◯ Disagree A Little ◯ Agree A Little ◯ Agree ◯ Agree A Lot

2. You can learn new things, but you cannot really change your basic level of intelligence.
◯ Disagree A Lot ◯ Disagree ◯ Disagree A Little ◯ Agree A Little ◯ Agree ◯ Agree A Lot

3. I like my work best when it makes me think hard.
◯ Disagree A Lot ◯ Disagree ◯ Disagree A Little ◯ Agree A Little ◯ Agree ◯ Agree A Lot

4. I like my work best when I can do it really well without too much trouble.
◯ Disagree A Lot ◯ Disagree ◯ Disagree A Little ◯ Agree A Little ◯ Agree ◯ Agree A Lot

5. I like work that I'll learn from even if I make a lot of mistakes.
◯ Disagree A Lot ◯ Disagree ◯ Disagree A Little ◯ Agree A Little ◯ Agree ◯ Agree A Lot

6. I like my work best when I can do it perfectly without any mistakes.
◯ Disagree A Lot ◯ Disagree ◯ Disagree A Little ◯ Agree A Little ◯ Agree ◯ Agree A Lot

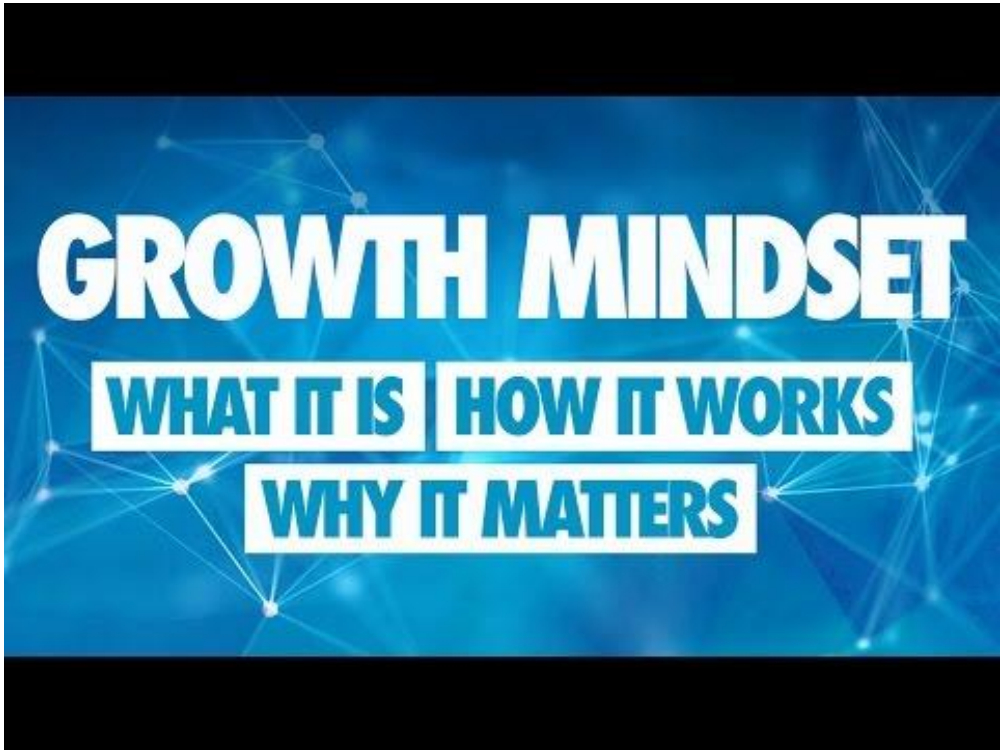
7. When something is hard, it just makes me want to work more on it, not less.
◯ Disagree A Lot ◯ Disagree ◯ Disagree A Little ◯ Agree A Little ◯ Agree ◯ Agree A Lot

8. To tell the truth, when I work hard, it makes me feel as though I'm not very smart.
◯ Disagree A Lot ◯ Disagree ◯ Disagree A Little ◯ Agree A Little ◯ Agree ◯ Agree A Lot

What do you think?

- Were the results accurate? Anything surprising?
- Turn to your neighbor and discuss your results.

Why Growth Mindset?



Messages About Failure

Nine year old Elizabeth was on her way to her first gymnastics meet. Lanky, flexible, and energetic, she was just right for gymnastics and loved it. She was good and felt confident of doing well.

Messages (continued)

Although she did a nice job, the scoring changed after the first few girls and she lost. She did well in other events, but not well enough to win. By the end Elizabeth had received no ribbons and was devastated.

What would you say if you were Elizabeth's parents?

1. Tell Elizabeth *you* thought she was the best.
2. Tell her she was robbed of a ribbon that was rightfully hers.
3. Reassure her that gymnastics is not that important.
4. Tell her she has the ability and will surely win next time.
5. Tell her she didn't deserve to win.

Reflect

Which statements reflect a growth mindset? Which do not? Why?

1. Tell Elizabeth *you* thought she was the best.
2. Tell her she was robbed of a ribbon that was rightfully hers.
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What would you do if you were Elizabeth's parents?

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5. Tell her she didn't deserve to win.

There is a strong message in our society about how to boost children's self-esteem, and a main part of that message is: *Protect them from failure!* While this may help with the immediate problem of a child's disappointment, it can be harmful in the long run. Why?

Let's look at the five possible reactions from a mindset point of view—and listen to the messages:

The first (*you* thought she was the best) is basically insincere. She was not the best—you know it, and she does, too. This offers her no recipe for how to recover or how to improve.

The second (she was robbed) places blame on others, when in fact the problem was mostly with her performance, not the judges. Do you want her to grow up blaming others for her deficiencies?

The third (reassure her that gymnastics doesn't really matter) teaches her to devalue something if she doesn't do well in it right away. Is this really the message you want to send?

The fourth (she has the ability) may be the most dangerous message of all. Does ability automatically take you where you want to go? If Elizabeth didn't win this meet, why should she win the next one?

The last option (tell her she didn't deserve to win) seems hardhearted under the circumstances. And of course you wouldn't say it quite that way. But that's pretty much what her growth-minded father told her.

Here's what he actually said: "Elizabeth, I know how you feel. It's so disappointing to have your hopes up and to perform your best but not to win. But you know, you haven't really earned it yet. There were many girls there who've been in gymnastics longer than you and who've worked a lot harder than you. If this is something you really want, then it's something you'll really have to work for."

He also let Elizabeth know that if she wanted to do gymnastics purely for fun, that was just fine. But if she wanted to excel in the competitions, more was required.

Elizabeth took this to heart, spending much more time repeating and perfecting her routines, especially

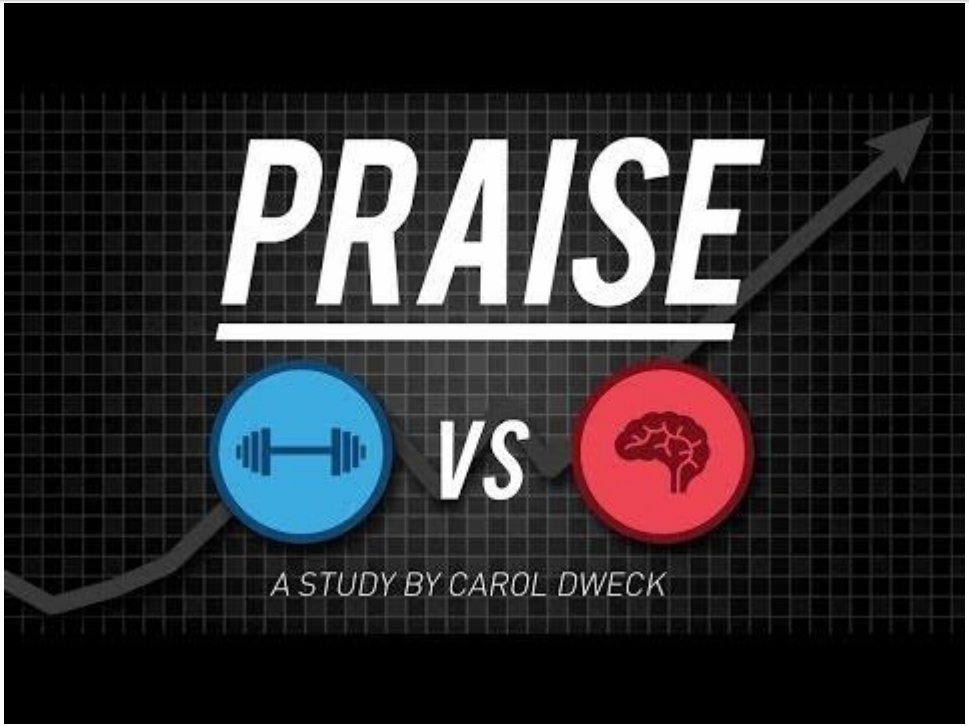
Carol Dweck on Growth Mindset

"A growth mindset isn't just about effort. Perhaps the most common misconception is simply equating the growth mindset with effort. Certainly, effort is key for students' achievement, but it's not the only thing. Students need to try new strategies and seek input from others when they're stuck. They need this repertoire of approaches–not just sheer effort–to learn and improve."

What we Say Matters!

Before watching the following video reflect on how you give your students positive and negative feedback, write down a quick list.

What we Say Matters!!!

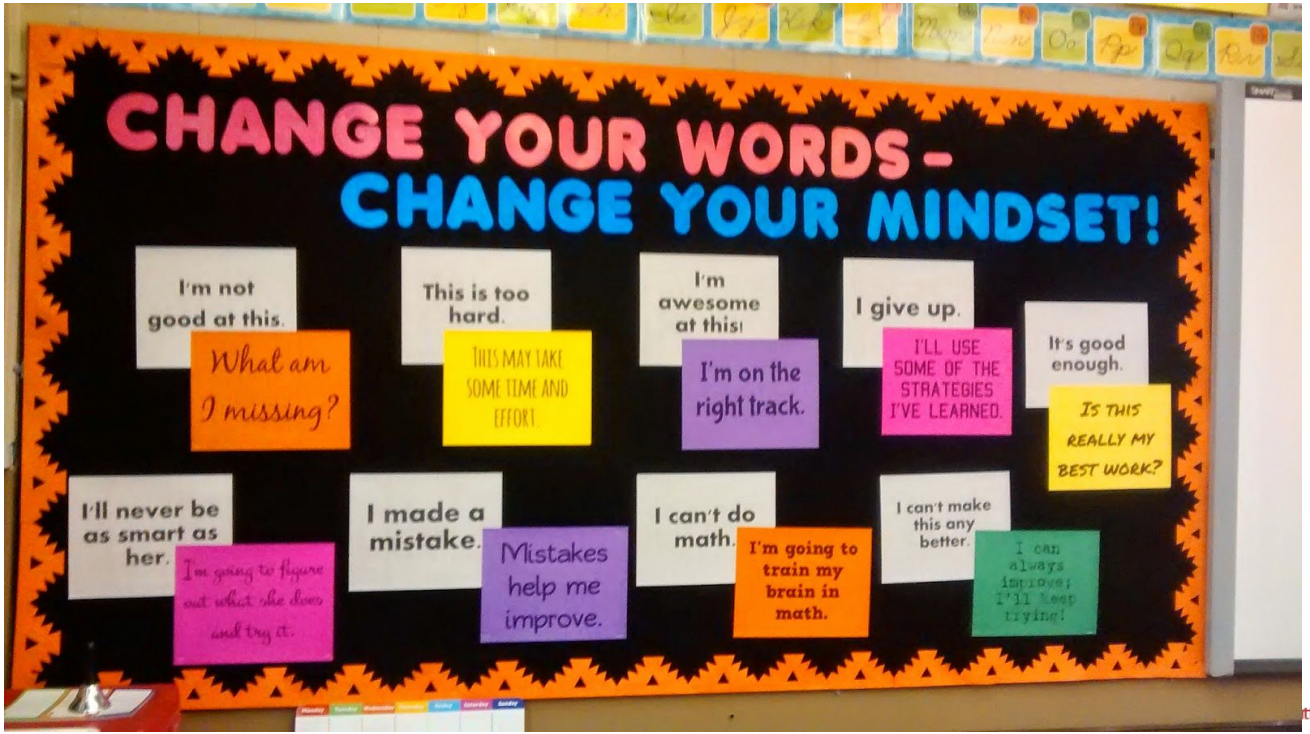


What We Say Matters!!!

Revisit your notes from before the video.

Are you using a growth mindset when you speak to your students? What are you doing well? What could you improve?

Is a MINDSET bulletin board enough?



Six Classroom Moves

When students come to class with a fixed mindset, teacher Cindel Tobias uses these classroom moves to cultivate a growth mindset!

3x-y

Starting with Families

Re-Phrasing

Mistakes and Learning

Hard Work

Assessment Practices

Effort Praise

The Challenge

"It is very hard to chip away at a deeply held fixed mindset in math, especially when you only see students for one hour a day at the high school level. Despite this uphill push, I have found success in starting to change a student's mindset over the course of a school year so they are at least more open to the idea that they could be "okay" or even "good" at math and redefine what they mean by being "good" at math."

-Cindel Tobias

mindset works

Becky Berg and Jamie Nixdorf

- Becky's website:
  - https://sites.google.com/a/billingsschools.org/bpsccmath/
  - Growth Mindset Modules

SIGN UP FOR UPCOMING MATH PD OPPORTUNITIES: Marisa.Graybill@mt.gov

September 2018	**October 7th- 28th** -Number Systems & Operations (K-3) -Number Systems & Operations (4-7)	**November 4th- 25th** -Ratios and Proportions (6-7) -Functions as Objects (HS)
December 2nd- 23rd -You Decide How to Divide (3-5) -Linear Relationships (7-9)	**January 6th 2019- 27th** -Developing Fraction Sense (3-5) -Transformations and Proofs (HS)	**February 3rd- 24th** -Algebraic Thinking (K-5) -Algebraic Thinking (6-7)
March 3rd- 24th -Measurement (K-3) -Describing Data (4-7) -Statistical Inferences (HS)	**April 7th – 28th** -Geometric Thinking (K-3) -Geometric Thinking (4-7) -Exploring Transformations (7-9)	**May 5th- 26th** -Connecting Length, Area, and Volume (K-5)
June 2nd- 23rd -Fraction Models and Operations (3-5) -Making Sense of Modeling (HS)	**July 7th – 28th** -Mathematical Practices (K-8) -Mathematical Practices (HS)	**August** **-Courses offered as requested**

STREAM- FREE 3 week Courses on the Teacher Learning Hub

-Enroll in courses today by at goo.gl/yho6DJ

-Find a full list of courses with descriptions at goo.gl/Rq3wjs

Montana Elementary Math Community!

-Monthly virtual gatherings

-Sharing of ideas and resources

- First meeting October 28 from 7-8pm

goo.gl/ra9D8i

Thank you!

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